

Remarks

The Office Action mailed October 15, 2010 has been received and reviewed. Claims 1, 4, 16, 22, 44, 65, and 68-73 have been amended, no claims have been canceled, and no new claims are presented. As a result, claims 1-5, 7-14, 16, 18-24, 26-36, 38, 40-48, 50-57, 59, 61-65, and 68-73 remain pending. Reconsideration and withdrawal of the rejections are respectfully requested.

Amended Claims

Claims 4 and 16 have been amended to depend from claim 3 in view of the antecedent basis issue identified by the Examiner.

Claims 1, 22, 44, 65, and 68-73 have been amended to recite that the terminal is "an electrically conductive metal" terminal. Support for these amendments can be found in, e.g., paragraphs [0013], [0081] and Table I on page 12 of the application as filed. Entry and consideration of these amendments are respectfully requested.

Claims 65 and 72 have also been amended to correct typographical errors by adding the word "with" in claim 65 and inserting a comma after "tantalum" in claim 72.

The 35 U.S.C. §112, Second Paragraph, Rejection

Claims 4 and 16 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicants have amended claims 4 and 16 to depend from claim 3 (which recites both a first connector and a second connector) and respectfully submit that the claims do meet the requirements of §112, second paragraph.

Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

The 35 U.S.C. §103 Rejections

Claims 1, 2, 5, 7-14, 16, 18-21, and 73 were rejected under 35 U.S.C. §103(a) as being unpatentable over Seifried et al. (U.S. Patent No. 5,531,003) in view of Lessar et al. (U.S. Patent No. 5,902,326) and Stevenson (U.S. Patent No. 6,008,980).

Claims 22, 26-36, 38, 40-45, 48, 50-57, 59, and 61-65 were rejected under 35 U.S.C. §103(a) as being unpatentable over Seifried et al. in view of Lessar et al. and Stevenson as applied above, and in view of Dahlberg et al. (U.S. Patent No. 5,245,999).

Claims 3, 23, 46, 68, 70, and 72 were rejected under 35 U.S.C. §103(a) as being unpatentable over Seifried et al. in view of Lessar et al., Stevenson, and Dahlberg as applied above, and further in view of Pless et al. (U.S. 5,131,388).

Claims 4, 16, 24, 47, 65, 68, 69, 71, and 72 were rejected under 35 U.S.C. §103(a) as being unpatentable over Seifried et al. in view of Lessar et al., Stevenson, and Dahlberg as applied above, and further in view of Langer (U.S. 4,254,775).

Applicants respectfully traverse all of these rejections and the assertions made in support of them.

More particularly, all of the obviousness rejections present in the Office Action rely on a combination of Seifried et al. in view of Lessar et al. and Stevenson et al. which, it is asserted, suggest many of the features recited in all of independent claims 1, 22, 44, 65, and 68-73. Applicants respectfully disagree with this assertion and submit that a *prima facie* case of obviousness has not been established with respect to any of independent claims 1, 22, 44, 65, and 68-73.

A Refractory Metal Coating on a Metal Terminal is Not Taught or Suggested

Each of independent claims 1, 22, 44, 65, and 68-73 recites, *inter alia*, a feedthrough assembly that includes an electrically conductive metal terminal, a first conductive metal coating covering and in contact with the first end of the terminal, and a second conductive metal coating covering and in contact with the first conductive metal coating on the first end of the terminal (where the first conductive metal is a refractory metal and the second conductive metal is a noble metal or a noble metal alloy).

Among the reasons for Applicants' position that a *prima facie* case of obviousness has not been established is that it is admitted that Seifried et al. does not "disclose a first conductive coating of a refractory metal." *Office Action*, page 4 (October 15, 2010). In an attempt to remedy that deficiency, it is asserted that "Lessar teaches that it is known to apply an adhesion layer of a refractory metal prior to a noble metal coating/braze as set forth in Col. 6, line 40-48 for providing the predictable results of facilitating adhesion of a noble metal coating." *Id.* Applicants respectfully disagree with that assertion.

Lessar et al. actually teaches the application of "a coating of niobium, titanium or niobium/titanium alloy" on a sapphire lens to improve the adhesion of brazing material to the sapphire lens. The following excerpt from Lessar et al. describes this aspect of Lessar et al.

- 40 Typically, when the pure gold brazing material is used, the sapphire lens 30 must first be provided with a coating of niobium, titanium, or niobium/titanium alloy and a coating of a gold over the niobium or titanium in the areas where the brazed joint is to be formed. Various proportions of niobium
45 and titanium may be co-sputtered to form the desired layer of a niobium/titanium alloy. These and other considerations regarding the brazing of sapphire lens 30 are discussed in International Publication No. WO 80/01620.

Lessar et al., Col. 6, lines 40-48.

In other words, the teachings of Lessar et al. are limited to techniques used to improve the adhesion of gold brazing to a sapphire lens, not "an electrically conductive metal terminal" as recited in each of independent claims 1, 22, 44, 65, and 68-73.

In view of that limited disclosure, Applicants respectfully submit that one of ordinary skill in the art would, in view of the teachings of Lessar, find no motivation to provide a refractory metal coating on "an electrically conductive metal terminal" as is recited in each of independent claims 1, 22, 44, 65, and 68-73 to enhance the adhesion of gold brazing material to a metal terminal. Any teaching, suggestion or motivation provided by Lessar et al. would be

limited to techniques for enhancing the adhesion of gold brazing material to sapphire objects, not metal ones.

Because the combination of Seifried et al. in view of Lessar et al. forms the basis for all of the obviousness rejections, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to any of claims 1-5, 7-14, 16, 18-24, 26-36, 38, 40-48, 50-57, 59, 61-65, and 68-73 because of the deficiencies in this basic combination as discussed above. Reconsideration and withdrawal of all of the obviousness rejections are, therefore, respectfully requested.

A Second Conductive Metal Coating Covering At Least a Portion of the Outer Surface of a Ferrule is Not Taught or Suggested

Each of independent claims 1, 22, 44, 65, and 68-73 recites, *inter alia*, a feedthrough assembly that includes a ferrule having an inner surface and an outer surface and a second conductive metal coating covering at least a portion of the ferrule outer surface (where the second conductive metal coating is a noble metal or a noble metal alloy).

Among the reasons for Applicants' position that a *prima facie* case of obviousness has not been established is that it is admitted that Seifried et al. does not disclose a "second coating covering a portion of the ferrule outer surface." *Office Action*, page 4 (October 15, 2010). In an attempt to remedy that deficiency, it is asserted that "Stevenson teaches that it is known to apply a noble metal coating over a portion of the outer ferrule surface as well as the terminal pin for providing the predictable results of reducing oxidation on the ferrule surface and sealing the ferrule from fluid entering the interior space." *Id.* Applicants respectfully disagree with these assertions.

Further, Applicants respectfully submit that these assertions cannot be used to support a *prima facie* case of obviousness because no portion of Stevenson et al. is cited to support the assertions. In the absence of identification of any specific teachings of Stevenson et al. to support the assertions, Applicants cannot rationally address the basis for this rejection.

As a result, Applicants respectfully submit that the assertions made with respect to the teachings of Stevenson et al. do not rise above the level of conclusory statements – and conclusory statements cannot form the basis for a *prima facie* case of obviousness.

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR Int'l Co. v. Teleflex Inc.*). In the present rejection, although some articulated reasoning has been provided, no rational underpinning (e.g., specific teachings or suggestions found in Stevenson et al.) has been provided.

Because the combination of Seifried et al. in view of Lessar et al. and Stevenson et al. also forms the basis for all of the obviousness rejections, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to any of claims 1-5, 7-14, 16, 18-24, 26-36, 38, 40-48, 50-57, 59, 61-65, and 68-73 because of the deficiencies in this basic combination as discussed above. Reconsideration and withdrawal of all of the obviousness rejections are, therefore, respectfully requested.

Claims 7-8, 26-27, and 50-51

In addition to the reasons presented above with respect to all of rejected claims 1-5, 7-14, 16, 18-24, 26-36, 38, 40-48, 50-57, 59, 61-65, and 68-73, Applicants also submit that a *prima facie* case of obviousness has not been established with respect to pending claims 7-8, 26-27, and 50-51 because the assertions made in support of the rejection of these claims are not supported by the cited references.

In particular, it was asserted, with respect to claims 7 and 8 that one of ordinary skill would have been motivated "to substitute either rhodium or ruthenium as the conductive metal coating since such a modification would provide the predictable results of minimizing and controlling the growth of oxidation on the terminal" *Office Action*, page 5 (October 15, 2010). Applicants respectfully traverse this assertion.

The same assertion was presented to support the rejections of claims 26-27. Although no assertions were presented to support the rejection of claims 50-51, Applicants have included

those claims here because they also recite the use of ruthenium and rhodium in connection with independent claim 44.

Applicants respectfully traverse these assertions because they are not supported by any of the references relied on in support of the obviousness rejections of claims 7-8, 26-27, and 50-51 (which, as admitted in the Office Action, do not disclose the use of rhodium or ruthenium as a metal coating).

If, in place of explicit support, it is the intent of the Examiner to rely on some asserted inherent properties with respect to metal coatings of rhodium or ruthenium, then Applicants respectfully submit that the standards for a rejection based on inherency have not been met. Specifically, no facts or technical reasoning have been provided to establish that coatings of rhodium or ruthenium, in combination with all of the other elements recited in the claims would necessarily provide the properties upon which this obviousness rejection is based (e.g., "minimizing and controlling the growth of oxidation on the terminal").

This argument was previously presented in the responses filed on March 5, 2010 and July 16, 2010. As before, no response has been provided in support of the rejection of these claims in the present Office Action. "In order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner must provide clear explanations of all actions taken by the examiner during prosecution of an application." M.P.E.P. § 707.07(f). "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." M.P.E.P. § 707.07(f). "The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal." M.P.E.P. § 706.07.

If the rejections of claims 7-8, 26-27 and 50-51 are maintained, Applicants respectfully request identification of a portion of any of the cited references that teaches substituting either rhodium or ruthenium as the conductive metal coating to provide the predictable results of minimizing and controlling the growth of oxidation on the terminal to be included in the next Official Communication.

Amendment and Response

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For at least these reasons, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to any of claims 7-8, 26-27 and 50-51. Reconsideration and withdrawal of the rejection of those claims are, therefore, respectfully requested.

Summary

It is respectfully submitted that the pending claims are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicants' Representatives at the telephone number listed below if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted

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CERTIFICATE UNDER 37 C.F.R. §1.8:

The undersigned hereby certifies that this paper is being transmitted via the U.S. Patent and Trademark Office electronic filing system in accordance with 37 C.F.R. §1.6(a)(4) to the Patent and Trademark Office addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 15th day of February, 2011.

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